

Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:24

First Dose M/F: NA / NA

Lab: BAT

C Number: C93011B

Lock Date: 04/02/1997

Cage Range: All

Date Range: All

Reasons For Removal: All

Removal Date Range: All

Treatment Groups: All

Study Gender: Both

PWG Approval Date NONE

Experiment Number: 93011-03
Test Type: 90-DAY
Route: DOSED FEED
Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
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First Dose M/F: NA / NA
Lab: BAT

F 344/N Rat Male 0 PPM	DAY ON TEST	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9
		2	2	2	2	2	2	2	2	2
		0	0	0	0	0	0	0	0	0
ANIMAL ID		0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	1
		1	2	3	4	5	6	7	8	9

*TOTALS

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Parasite Metazoan		X	X								2
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Basophilic Focus		X									1
Hepatodiaphragmatic Nodule		X									1
Inflammation, Chronic Active				1	1	1	1	1			5 1.0
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10
Cardiomyopathy	1	1	1	1	1	1	1	1			7 1.0

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 93011-03

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:24

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Male
0 PPM

DAY ON TEST										
	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
9	9	9	9	9	9	9	9	9	9	9
2	2	2	2	2	2	2	2	2	2	2
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	1
1	2	3	4	5	6	7	8	9	0	

*TOTALS

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	10
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10

General Body System

NONE

Genital System

Epididymis	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland	+	+	+	+	+	+	M	+	+	+	9
Prostate	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10

Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10

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+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

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1-4 ..Lesion qualified as:

- 1) Minimal
- 2) Mild
- 3) Moderate
- 4) Marked

Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:24

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Male
0 PPM**

DAY ON TEST										
	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
9	9	9	9	9	9	9	9	9	9	9
2	2	2	2	2	2	2	2	2	2	2
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	1
1	2	3	4	5	6	7	8	9	0	

*TOTALS

Thymus

+ + + + + + + + + + 10

Integumentary System

Mammary Gland

+ + + + + + + + + + 10

Skin

+ + + + + + + + + + 10

Musculoskeletal System

Bone

+ + + + + + + + + + 10

Nervous System

Brain

+ + + + + + + + + + 10

Respiratory System

Lung

+ + + + + + + + + + 10

Alveolar Epith, Hyperplasia

2 1 2.0

Nose

+ + + + + + + + + + 10

Trachea

+ + + + + + + + + + 10

Special Senses System

NONE

Urinary System

Kidney

+ + + + + + + + + + 10

Nephropathy

1 1 1 1 1 1 1 1 7 1.0

Urinary Bladder

+ + + + + + + + + + 10

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

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A ..Autolysis precludes evaluation

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Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:24

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Male
781 PPM**

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*TOTALS

Alimentary System

| | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Liver | + | + | + | + | + | + | + | + | + | + | 10 |
| Hepatodiaphragmatic Nodule | | | | | X | | | | | | 1 |
| Inflammation, Chronic Active | 1 | 1 | | 1 | 1 | | | 1 | | | 5 1.0 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | 10 |
| Epithelium, Hyperkeratosis | | | | | | 1 | 1 | 1 | 1 | | 4 1.0 |

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

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Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:24

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Male
781 PPM**

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*TOTALS

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
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Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:24

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Male
1562 PPM

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |

*TOTALS

Alimentary System

| | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Liver | + | + | + | + | + | + | + | + | + | + | 10 |
| Hepatodiaphragmatic Nodule | | | | | | | | X | | | 1 |
| Inflammation, Chronic Active | 1 | | 1 | 1 | | | | | | | 3 1.0 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | 10 |
| Epithelium, Hyperkeratosis | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | 8 2.0 |
| Epithelium, Hyperplasia | | | | 1 | 1 | | | | | | 2 1.0 |

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

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Species/Strain: Rat/F 344/N

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Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:24

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Male
1562 PPM**

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | |

*TOTALS

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
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Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:25

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Male
3125 PPM

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*TOTALS

Alimentary System

| | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Liver | + | + | + | + | + | + | + | + | + | + | 10 |
| Hepatodiaphragmatic Nodule | | | | | X | | | X | | | 2 |
| Inflammation, Chronic Active | 1 | | | | 1 | | 1 | | 1 | | 4 1.0 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | 10 |
| Epithelium, Hyperkeratosis | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 1 | 1 | 9 1.8 |
| Epithelium, Hyperplasia | 2 | 2 | 2 | 2 | 2 | | 1 | 2 | 1 | | 8 1.8 |

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

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Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

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Date Report Requested: 10/21/2014

Time Report Requested: 11:41:25

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Male
3125 PPM**

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*TOTALS

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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Experiment Number: 93011-03

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Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:25

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Male
6250 PPM

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |

*TOTALS

Alimentary System

| | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|-----|
| Liver | + | + | + | + | + | + | + | + | + | + | 10 |
| Cytoplasmic Alteration | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 |
| Hepatodiaphragmatic Nodule | | | | X | | | X | | | | 2 |
| Inflammation, Chronic Active | | | | | 1 | | 1 | 1 | | | 3 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | 10 |
| Epithelium, Hyperkeratosis | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 10 |
| Epithelium, Hyperplasia | 2 | 2 | 3 | | 2 | 1 | 2 | 2 | 2 | | 8 |
| | | | | | | | | | | | 2.2 |
| | | | | | | | | | | | 2.0 |

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

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Species/Strain: Rat/F 344/N

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Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:25

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Male
6250 PPM**

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*TOTALS

NONE

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:25

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Male
12,500 PPM**

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

TOTALS*Alimentary System**

| | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | 10 |
| Liver | + | + | + | + | + | + | + | + | + | + | 10 |
| Cytoplasmic Alteration | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 |
| Inflammation, Chronic Active | | | | | 1 | 1 | 1 | 1 | 1 | | 5 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | 10 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | 10 |
| Epithelium, Hyperkeratosis | 3 | 3 | 2 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 10 |
| Epithelium, Hyperplasia | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 10 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | 10 |

Cardiovascular System

| | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|-----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | 10 |
| Heart | + | + | + | + | + | + | + | + | + | + | 10 |
| Cardiomyopathy | | 1 | | | 1 | 1 | 1 | 1 | | 5 | 1.0 |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:25

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Male
12,500 PPM

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*TOTALS

Endocrine System

| | | | | | | | | | | | |
|--------------------|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | 10 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | 10 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | 10 |
| Parathyroid Gland | M | + | + | + | + | + | + | + | + | + | 9 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | 10 |

General Body System

NONE

Genital System

| | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|----|
| Epididymis | + | + | + | + | + | + | + | + | + | + | 10 |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Prostate | + | + | + | + | + | + | + | + | + | + | 10 |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | 10 |
| Testes | + | + | + | + | + | + | + | + | + | + | 10 |

Hematopoietic System

| | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | 10 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | 10 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | 10 |
| Spleen | + | + | + | + | + | + | + | + | + | + | 10 |
| Thymus | + | + | + | + | + | + | + | + | + | + | 10 |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:25

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Male
12,500 PPM**

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

***TOTALS**

Thymus

+ + + + + + + + + + 10

Integumentary System

Mammary Gland

+ + + + + + M + + + 9

Skin

+ + + + + + + + + + 10

Musculoskeletal System

Bone

+ + + + + + + + + + 10

Nervous System

Brain

+ + + + + + + + + + 10

Respiratory System

Lung

+ + + + + + + + + + 10

Inflammation, Chronic Active

2 1 1 1 4 1.3

Nose

+ + + + + + + + + + 10

Trachea

+ + + + + + + + + + 10

Special Senses System

NONE

Urinary System

Kidney

+ + + + + + + + + + 10

Nephropathy

1 1 1 1 4 1.0

Urinary Bladder

+ + + + + + + + + + 10

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:25

First Dose M/F: NA / NA

Lab: BAT

END OF MALE DATA

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:25

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Female
0 PPM**

| DAY ON TEST | 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | |
|-------------|---------------------|--|--|--|--|--|--|--|--|--|
| | 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | |
| ANIMAL ID | 9 9 9 9 9 9 9 9 9 9 | | | | | | | | | |
| | 2 2 2 2 2 2 2 2 2 2 | | | | | | | | | |
| ANIMAL ID | 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | |
| | 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | |
| ANIMAL ID | 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | |
| | 6 6 6 6 6 6 6 6 6 7 | | | | | | | | | |
| ANIMAL ID | 1 2 3 4 5 6 7 8 9 0 | | | | | | | | | |

TOTALS*Alimentary System**

| | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|--------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | 10 |
| Liver | + | + | + | + | + | + | + | + | + | + | 10 |
| Hepatodiaphragmatic Nodule | X | X | | | | X | | | | | 3 |
| Inflammation, Chronic Active | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 1.1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | 10 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | 10 |

Cardiovascular System

| | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|-----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | 10 |
| Heart | + | + | + | + | + | + | + | + | + | + | 10 |
| Cardiomyopathy | | | | | | | | 1 | | 1 | 1.0 |

Endocrine System

| | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | 10 |
|----------------|---|---|---|---|---|---|---|---|---|---|----|

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
2) Mild 4) Marked

Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:25

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Female
0 PPM**

| DAY ON TEST | 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | | |
|-------------|---------------------|--|--|--|--|--|--|--|--|--|--|
| | 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | | |
| ANIMAL ID | 9 9 9 9 9 9 9 9 9 9 | | | | | | | | | | |
| | 2 2 2 2 2 2 2 2 2 2 | | | | | | | | | | |
| | 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | | |
| | 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | | |
| | 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | | |
| | 6 6 6 6 6 6 6 6 6 7 | | | | | | | | | | |
| | 1 2 3 4 5 6 7 8 9 0 | | | | | | | | | | |

***TOTALS**

| | | | | | | | | | | | |
|--------------------|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | 10 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | 10 |
| Parathyroid Gland | M | + | + | + | M | + | + | + | + | + | 8 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | 10 |

General Body System

NONE

Genital System

| | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|-------|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Cyst | | | | | | 2 | | | | | 1 2.0 |
| Ovary | + | + | + | + | + | + | + | + | + | + | 10 |
| Uterus | + | + | + | + | + | + | + | + | + | + | 10 |

Hematopoietic System

| | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | 10 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | 10 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | 10 |
| Spleen | + | + | + | + | + | + | + | + | + | + | 10 |
| Thymus | + | + | + | + | + | + | + | + | + | + | 10 |

Integumentary System

| | | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Skin | + | + | + | + | + | + | + | + | + | + | 10 |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:25

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Female
0 PPM**

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |

*TOTALS

Skin + + + + + + + + + + 10

Musculoskeletal System

Bone + + + + + + + + + + 10

Nervous System

Brain + + + + + + + + + + 10

Respiratory System

Lung + + + + + + + + + + 10

Alveolar Epith, Inflammation, Chronic Active 1 1 1.0

Nose + + + + + + + + + + 10

Trachea + + + + + + + + + + 10

Special Senses System

NONE

Urinary System

Kidney + + + + + + + + + + 10

Mineralization 1 1 1 3 1.0

Nephropathy 1 1 1.0

Urinary Bladder + + + + + + + + + + 10

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:25

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Female
781 PPM

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*TOTALS

Alimentary System

| | | | | | | | | | | |
|----------------------------|--|---|---|---|---|---|---|---|---|-----|
| Liver | | + | + | + | + | + | + | | | 5 |
| Hepatodiaphragmatic Nodule | | X | X | X | X | | X | | | 5 |
| Stomach, Forestomach | | + | + | + | + | + | + | + | + | 10 |
| Epithelium, Hyperkeratosis | | 1 | 1 | 1 | 1 | 1 | 1 | | 6 | 1.0 |

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal
- 2) Mild
- 3) Moderate
- 4) Marked

Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:25

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Female
781 PPM**

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*TOTALS

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:25

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Female
1562 PPM

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |

*TOTALS

Alimentary System

| | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|-------|
| Liver | + | | | | | | | | | 1 |
| Hepatodiaphragmatic Nodule | X | | | | | | | | | 1 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | 10 |
| Epithelium, Hyperkeratosis | 1 | | 1 | 1 | 2 | 2 | | 1 | 2 | 7 1.4 |

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:25

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Female
1562 PPM**

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*TOTALS

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:25

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Female
3125 PPM**

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*TOTALS

Alimentary System

| | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|-------|
| Liver | + | | | | | | | | | 1 |
| Hepatodiaphragmatic Nodule | X | | | | | | | | | 1 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | 10 |
| Epithelium, Hyperkeratosis | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 9 1.6 |
| Epithelium, Hyperplasia | | | 1 | 2 | 1 | 2 | 2 | | | 5 1.6 |

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:25

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Female
3125 PPM**

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*TOTALS

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:25

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Female
6250 PPM**

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*TOTALS

Alimentary System

| | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|--------|
| Liver | + | | | | + | | | | | 2 |
| Hepatodiaphragmatic Nodule | X | | | | X | | | | | 2 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | 10 |
| Epithelium, Hyperkeratosis | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 10 2.0 |
| Epithelium, Hyperplasia | 2 | 2 | | 2 | 2 | 2 | 1 | 2 | 1 | 8 1.8 |

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:26

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Female
6250 PPM**

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*TOTALS

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

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1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
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Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:26

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Female
12,500 PPM

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*TOTALS

Alimentary System

| | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|--------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | 10 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | 10 |
| Liver | + | + | + | + | + | + | + | + | + | + | 10 |
| Inflammation, Chronic Active | | | | | 1 | | 1 | 1 | 1 | | 4 1.0 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | 10 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | 10 |
| Epithelium, Hyperkeratosis | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 10 2.2 |
| Epithelium, Hyperplasia | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 10 2.2 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | 10 |

Cardiovascular System

| | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|-------|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | 10 |
| Heart | + | + | + | + | + | + | + | + | + | + | 10 |
| Cardiomyopathy | | | | | 1 | 1 | 1 | | | | 3 1.0 |

Endocrine System

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

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I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 93011-03

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: p-tert-Butylcatechol

CAS Number: 98-29-3

Date Report Requested: 10/21/2014

Time Report Requested: 11:41:26

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Female
12,500 PPM**

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |

***TOTALS**

| | | | | | | | | | | | |
|--------------------|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | 10 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | 10 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | 10 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | 10 |

General Body System

NONE

Genital System

| | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|-------|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Ovary | + | + | + | + | + | + | + | + | + | + | 10 |
| Cyst | | | | | 2 | | | | | | 1 2.0 |
| Uterus | + | + | + | + | + | + | + | + | + | + | 10 |

Hematopoietic System

| | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | 10 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | 10 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | 10 |
| Spleen | + | + | + | + | + | + | + | + | + | + | 10 |
| Thymus | + | + | + | + | + | + | + | + | + | + | 10 |

Integumentary System

| | | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | 10 |
|---------------|---|---|---|---|---|---|---|---|---|---|----|

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

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Route: DOSED FEED

Species/Strain: Rat/F 344/N

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Time Report Requested: 11:41:26

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Female
12,500 PPM**

| DAY ON TEST | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |

***TOTALS**

| | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Skin | + | + | + | + | + | + | + | + | + | + | 10 |
| Musculoskeletal System | | | | | | | | | | | |
| Bone | + | + | + | + | + | + | + | + | + | + | 10 |
| Nervous System | | | | | | | | | | | |
| Brain | + | + | + | + | + | + | + | + | + | + | 10 |
| Respiratory System | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | 10 |
| Inflammation, Chronic Active | | | | | | | 2 | | 2 | | 2 2.0 |
| Nose | + | + | + | + | + | + | + | + | + | + | 10 |
| Trachea | + | + | + | + | + | + | + | + | + | + | 10 |
| Special Senses System | | | | | | | | | | | |
| NONE | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | 10 |
| Nephropathy | 1 | | | | | 1 | | 1 | 1 | | 4 1.0 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | 10 |

**** END OF REPORT ****

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked